

# FISH BIOLOGY



District of Columbia  
Fisheries and Wildlife Division

# Biology

What is Biology?

The study of living things.

Characteristics of living organisms?

Composed of cells.

Growth.

Metabolism.

Homeostasis.

Movement.

Response to stimulus.

Reproduction.





# Fish Biology

What is a fish?



## Characteristics of fish:

Body Temperature: Cold-blooded or ectothermic

Vertebrates: Have a bony backbone such as amphibians, reptiles, birds and mammals.

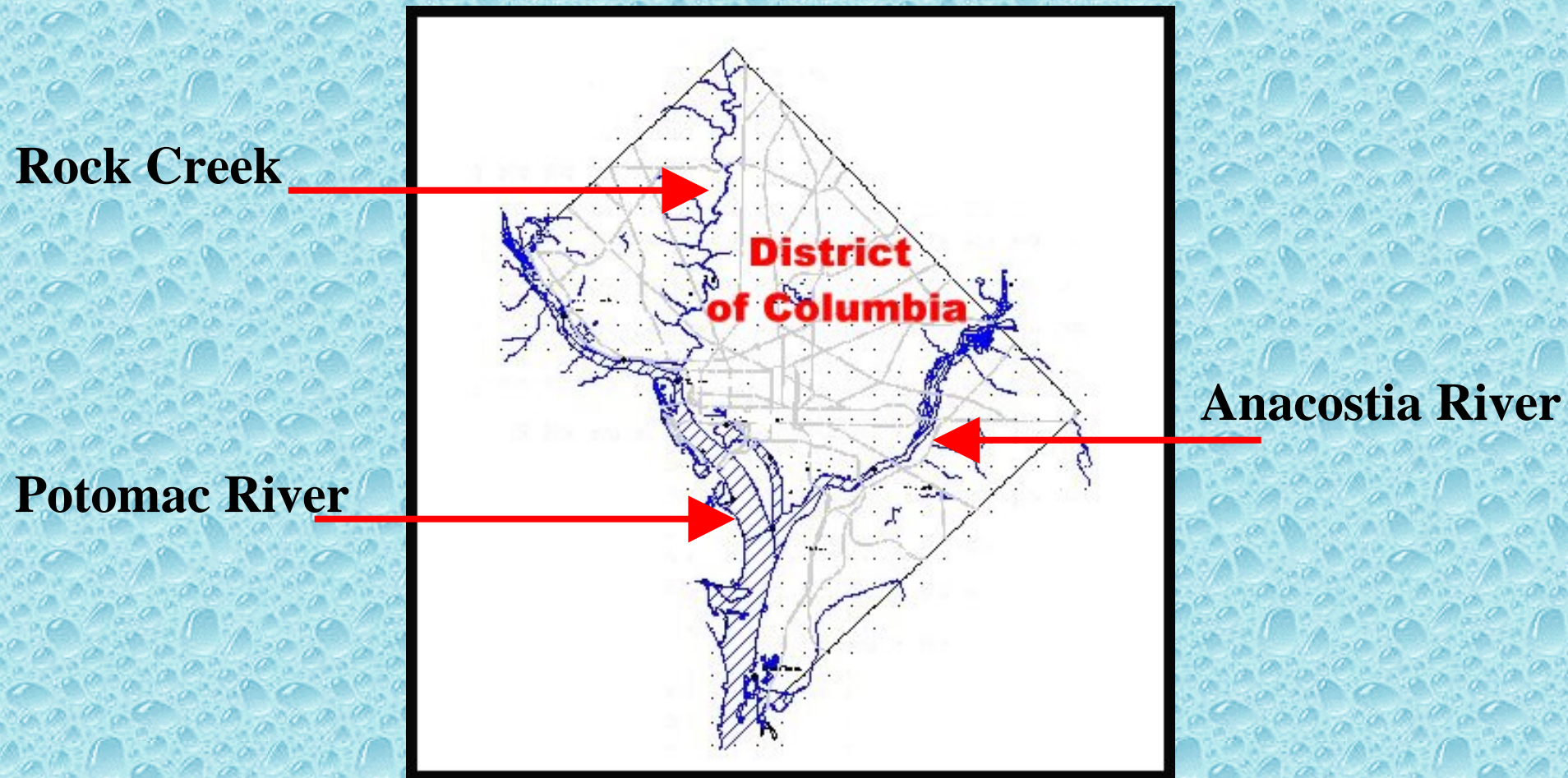
Respiration: Gills extract oxygen from the water.

Habitat: Aquatic environments.

Locomotion: Fins and undulating body motions.

# Aquatic Habitats

Where do fish live in the District?



# Local Species

In the District of Columbia what type of water do we have? **Freshwater** ~~**Saltwater**~~

What are some of the local species you would expect to find in the

**District?**

Bluegill

Pumpkinseed

White Perch

Yellow Perch

Channel Catfish

Walleye

American Shad

Hickory Shad

Largemouth Bass

Smallmouth Bass

Chain Pickerel

Northern Pike

Striped Bass

American Eel

Bullhead

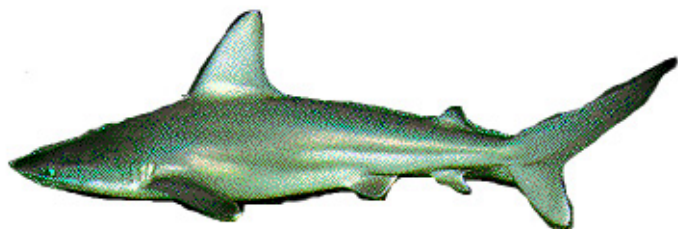
Herring

Trout

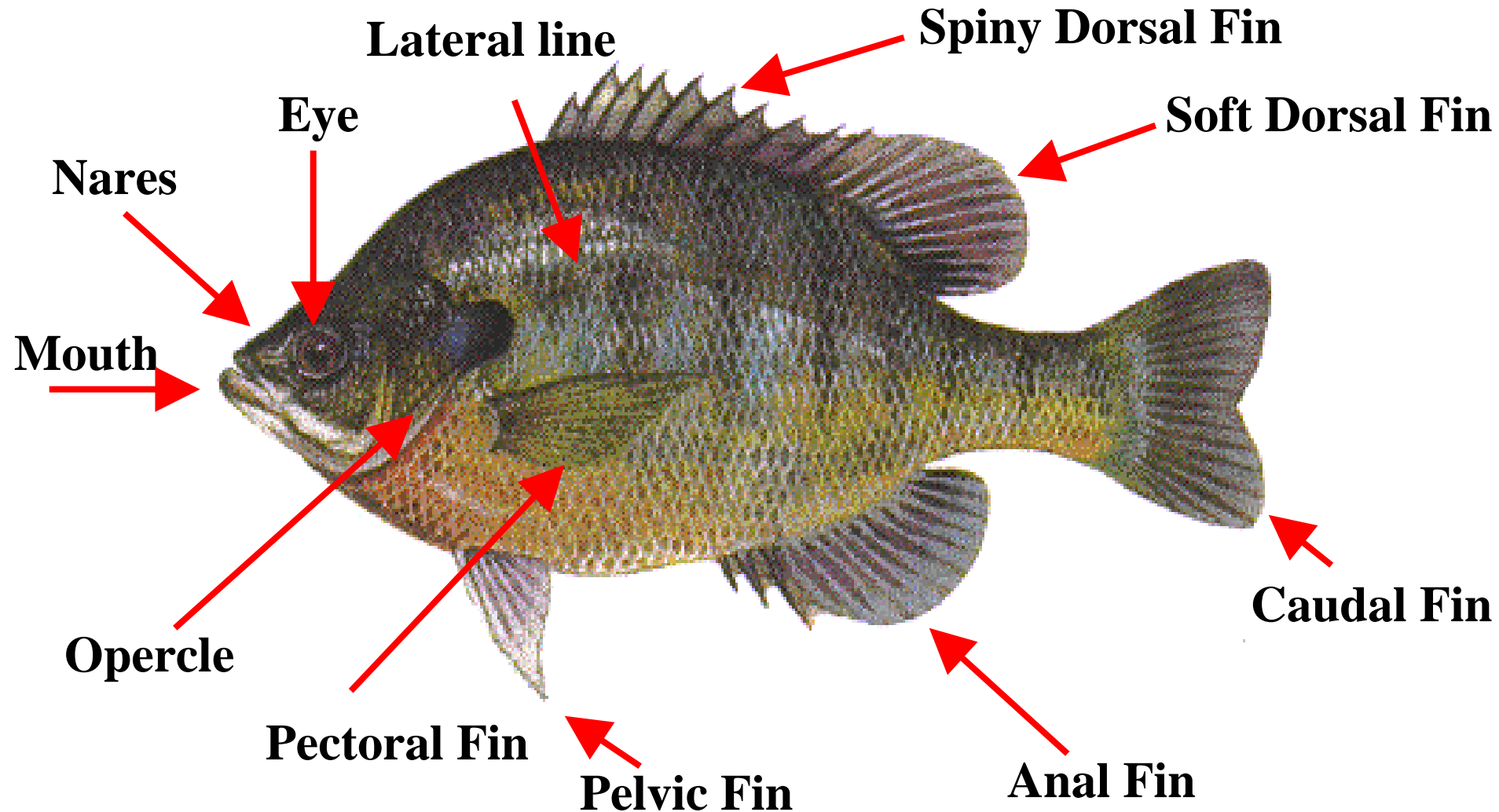
Minnow

# Local Species

Which fish would you **NOT** expect to see in the waters of the District?

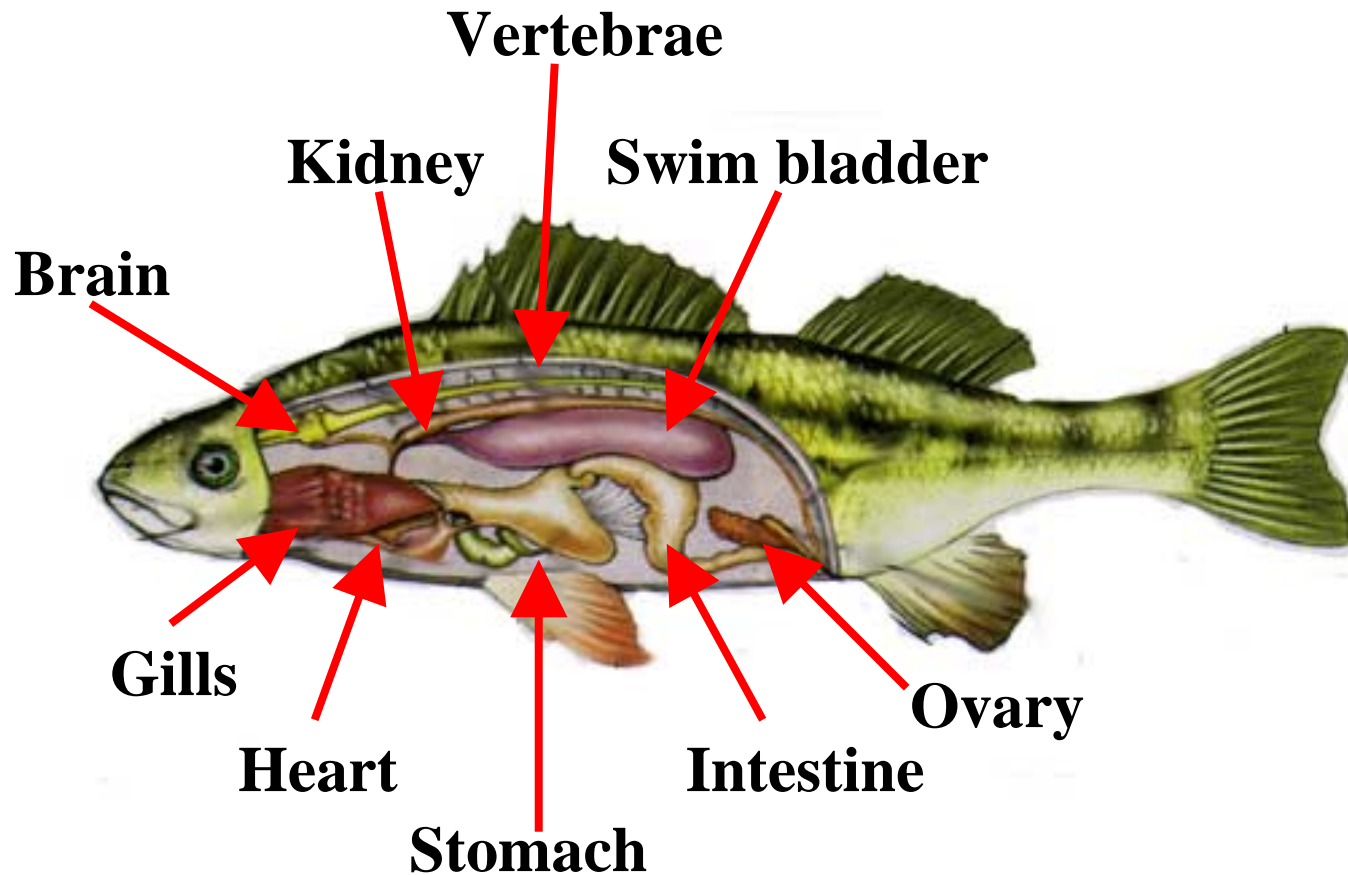


# External Fish Anatomy





# Internal Fish Anatomy





# Swimming and Movement

## FINS

Dorsal Fin: Stability

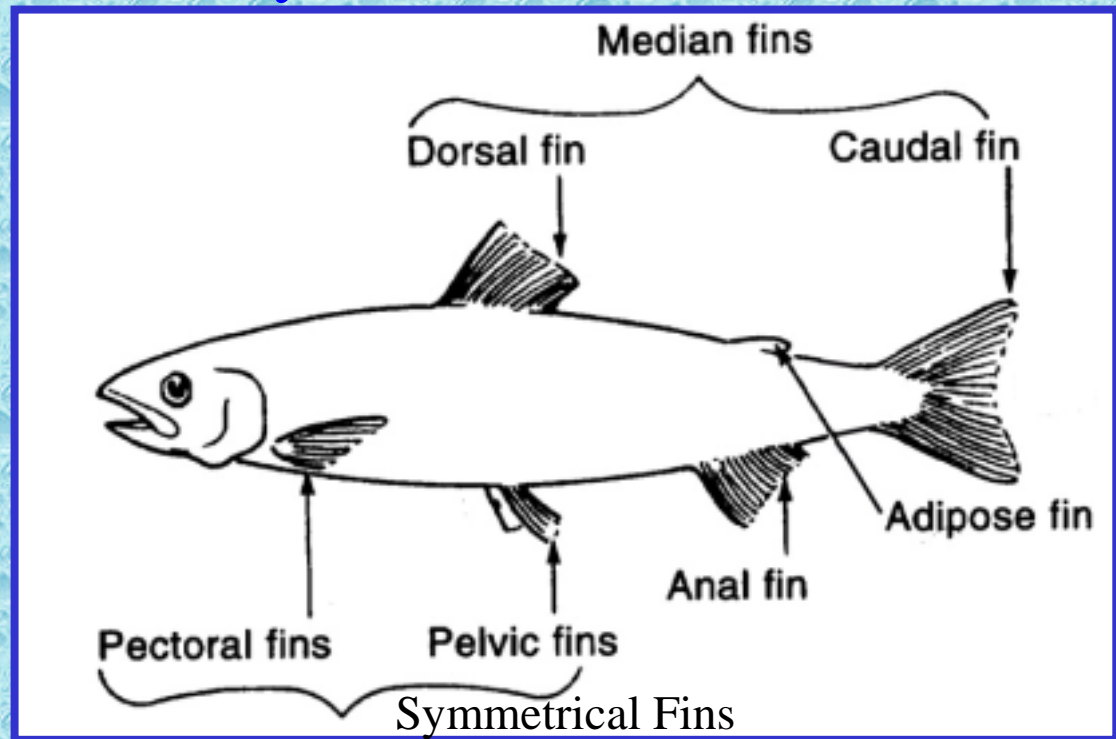
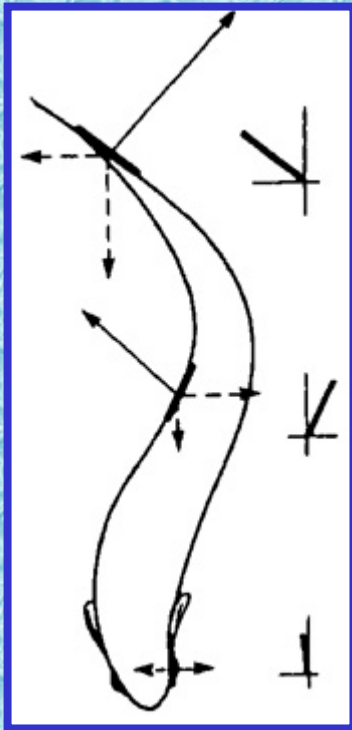
Caudal Fin: Speed (power)

Anal Fin: Stability

Pelvic Fin: Variable

Pectoral Fin: Navigation

Adipose Fin: Larval



Undulations of body or fins provide locomotion

# Summary

- Biology is the study of living things
- Fish are cold-blooded vertebrates.
- Fish use gills to extract oxygen from the water.
- Fish live in aquatic environments.
- Fish move by undulating body and fin motions.
- The local aquatic habitats in the District of Columbia include: Rock Creek park, the Potomac river and the Anacostia river.
- All of the bodies of water in the District are freshwater.